## CONTRIBUTION

## ICHTHYOLOGY OF AUSTRALIA.

## II.-NOTE ON SOME SOUTH AUSTRALIAN FISHES.

I have receired from Mr . Waterhouse, the able and indefatigable Curator of the South Australian Museum, a most interesting series of small fishes, collected by himself in the St. Vincent's Gulf, by means of a trawl. A considerable number appear new, and others are only imperfectly known. I intend, in the next volume of the publications of this Society, to give a full account of them, but I think it is only doing justice to Mr. Waterhouse to give here a list of the species, and a short diagnostic of his new discoveries. I just follow the order of his invoices:-

1. Hippocampus Breviceps.-Peters.
2. Phillopteryx Elongatus.-Cast.

Differs from Foliatus by its being of a smaller size ; the body much more elongate in both sexes; its foliated appendices much shorter, broader, and of an oval form.
3. Syngnathus Pacilolœmus.-Peters.
4. Leptoichthys Fistularius.-Kaup.
5. Stigmatophora Argus.-Richard.
6. Syngnathus Curtirostris.-Cast.

The snout is contained three times in the length of the head. Of a dark brown colour, with silvery spots on the head and anterior part of the body.

## 7. Stigmatophora Olivacea.-Cast.

Snout at least twice as long as the remaining part of the head; operculum without a longitudinal ridge; vent below the middle of the dorsal fin; egg-pouch extending over thirteen rings ; body rings, nineteen. Entirely of an olive colour.
8. Aploactisoma.-Cast.

This new genus is nearly allied to Richardson's Aploactis, but differs from it by the presence of teeth on the palatine bones, and the composition of the fins.
Aplo. Schomburgki.-Cast.
1st D., 5; 2nd D., 8/15. Dark brown, marbled with black; a spot of the last colour at the end of the dorsal.

## 9. Patcecus Waterhousii.-Cast.

The pectoral fin rather longer than the head, only extending to the anus; dorsal with thirty spines, the first sensibly longer than the others, and with its membrane deeply emarginated; caudal with the fifth, sisth, and seventh rays considerably prolongated ; anal with ten rays, the posterior ones being prolongated and pointed ; mouth surrounded by several series of bifid papillæ. Brown, marbled with white.
10. Apistes Marmoratus.-Cuv. and Val.
11. Glyptauchen Panduratus.-Richard.
12. Christiceps Splendens.-Cast.

Upper profile very convex ; first dorsal high, of three rays ; the second of twenty-eight spines and six rays; the anal has two spines and twenty-three rays. Carmine colour, with the head and fins orange.
13. Chironectes Filamentosus.-Cast.

Comes near Marmoratus. On the head, a long, thin, tentaculated spine, having on each side a slender, filiform, bifid tentacle; on the back, there is another long spine, ending, like the other, in a tuberculous knob, and bearing tentacles. D., 13 ; A., 8. Light brown, with black blotches; lower parts of the body covered with long fleshy appendices.
14. Monacanthus Perulifer.-Cast.

Anal fin with twenty-seven rays; dorsal spine with four series of barbs; the front series much closer together than the posterior series, and formed of small barbs. General appearance of Granulatus.
15. Vincentia.-Cast.

General characters of Chilodipterus, but no canines; differs from Pomatomus by its general high form ; its two dorsals are inserted one very near the other ; the anterior part of the body is considerably developed; eyes large ; two dorsals; the cleft of the mouth oblique; no teeth on the palatine bones, and no spines to the operculum. General appearance of Apogon.
Vin. Waterhousii.-Cast.
Reddish colour.
16. Cheilinus Aurantiacus.-Cast.

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\text { D. 9/11. A. 3/10. P. } 11 .
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Twenty-three scales on the longitudinal line, and ten on the transverse, three of which are above the lateral line. Of a beautiful orange colour; the dorsal and anal with a broad external black band, and a series of feeble, obscure spots near the body.
17. Gerres? Melbournensis.-Cast.
18. Odax. Three sorts:-
O. Radiatus.-Quoy and Gaim.
O. Frenatus.-Gunther.
O. Richardsonii.-Gunther.
19. Upeneichthys Porosus.-Cuv. and Val.

## 20-22. Heteroscarus.

I propose separating from Scarus, under this name, fishes having the upper jaw longer than the other; teeth soldered together, with a median suture in front at the upper jaw; scales large; fourteen or fifteen stiff dorsal spines, the three first prolongated in form of filaments; head naked, porous ; cheeks covered with scales, difficult to perceive, and seem-
ingly soldered together; operculum with several rows of large scalez; lateral line continuous.

Heteroscarus Filamentosus.-Cast.
The three first dorsal spines prolongated in long filaments. D., 15/11; A., 2/12.

Heteroscarus Modestus.-Cast.
The first dorsal spines less prolongated. D., 14/10; A., 2/11.
21. Platycephalus Inops?-Jenyns.

Accords well with the description, with the exception of the colour of ventrals and anal, which are of a light yellow, covered, like the other fins, with black punctiform spots.
23. Enoplosus Armatus.-White.

All the specimens are of a remarkably bright colour, and the cross-bands extend more on the second dorsal and on the anal than on the Melbourne specimens.
24. Diodon Spinosissimus?-Cuv.
25. Aracana Ornata.-Gray.
26. Ophiclinus.-Cast.

This new genus is characterised by-Body very elongate; mouth opening upwards; snout having two short filaments; ventral fins inserted in front of the pectorals, being formed of one short and two long filaments; dorsal composed of numerous spines and two rays, which are situated posteriorly; it has no anterior detached portion, and is, as the anal, attached to the caudal; the anal has no spines; lateral line only marked on the extreme anterior part of the body; teeth very numerous, short, very thick, crowded on all the bones of the palate, and also on very numerous rows on the lower jaw.

Ophicl. Antarcticus.-Cast.
Dorsal with sixty-three spines and two rays; anal with thirty-nine rays. Of a brownish red, with the lower parts lighter.
27. He teroclinus.-Cast.

This new genus is characterised by-Body sub-elongate; mouth opening upwards; snout without tentacles; ventral fins inserted in front of the pectorals, formed of one short and two long filaments; dorsals two, the first of three spines; the second of twenty-eight spines and three rays, placed posteriorly; it is attached to the tail; lateral line only marked on the extreme anterior part of the body; teeth short, blunt, thick; crowded on both jaws, with an external line of more slender and sharper ones; very numerous on all the palatine bones.

Heter. Adelaida,-Cast.
Of a reddish brown, with the lower parts of a yellowish white ; an irregular black band on the side.

## ERRATA.

Page 33, line 26, instead of : and as names without meaning, \&c., read: and names without meaning, \&c.
" 37 , " 19 , instead of: I spent nearly five years in the United States and Canada. I collected a considerable, \&c., read: I spent nearly five years in the United States and Canada, I collected, \&c.
", 40, " 37, instead of: Livington Rooke, read: Lavington Roope.
" 92, " 2, instead of the new species I propose here, \&c., read: the new genus I propose here, \&c.
, 129, " 16, instead of: sorts of these will, \&c., read: sorts of Blennius will certainly, \&c.

## OBSERVATIONS.

My genus Neotephrceps may be identical with Dr. Gunther's genus Melambaphes.
Trigla Polyommata is the type of a genus, Hoplonotus, Guichenot, "Ann. de la Société Linnéenne de Maine et Loire," vol. xix.

I have just received, through the kindness of Mr. George Kissley, a specimen of the Murray Chatessos, and I find it identical with Erebi.

